## THE IDENTITY OF THE PANAMANIAN GENUS DRESSLERIOPSIS (RUBIACEAE)

In the treatment of the Rubiaceae for the Flora of Panama, Dwyer (1980) described the endemic and monospecific genus Dressleriopsis and erected, although invalidly, the new tribe Dressleriopsideae. The new genus, which is said to be unique among New World Rubiaceae in having 8-pyrened fruits, seemed to me to be similar to the paleotropical genus Lasianthus Jack. Subsequent study of some of the specimens cited by Dwyer (viz. Mori \& Kalunki 2340 and Dwyer 9035, both MO) confirmed that Dressleriopsis Dwyer is synonymous with Lasianthus Jack.

Lasianthus has its major centers of distribution in Asia (about 120 species) and Africa (about 20 species), but it has long been known that one species occurs in Cuba (Schumann, 1891:121).

Dressleriopsis panamensis shows all the characteristics of Lasianthus emphasized by Petit (1964:22; see also Denys, 1981): axillary inflorescences, fruits (Fig. 2) with many pyrenes opening by a basal lid, seeds with weak and oily endosperm, and large embryos. Because of the fruit and seed characters, Petit proposed transferring Lasianthus from the Psathureae to the Morindeae.

The following new combination is necessary:
Lasianthus panamensis (Dwyer) Robbrecht, comb. nov. Dressleriopsis panamensis Dwyer, Ann. Missouri Bot. Gard. 67:153. 1980. type: Panama, Dressler 3560 (MO, holotype, m.v.).

Lasianthus panamensis resembles the group of Asiatic species in which dense hairiness of the leaf-blade is found in conjunction with an asymmetrical base, such as in L. attenuatus Jack, L. copelandii Elm., L. luzonensis Elm., L. rhinocerotis Bl., and L. wallichii Wight, but within this group, L. panamensis is unique in being a low, mostly single-stemmed woody plant usually attaining a height of about half a meter and sometimes forming horizontal runners. This lifeform, typical of the rain forest floor, is common in other groups of Lasianthus (e.g. the African L. batangensis K. Schum.), in the related genus Trichostachys


Figure 1. Known distribution of Lasianthus panamensis (Dwyer) Robbrecht.


Figure 2. Pyrenes of Lasianthus lanceolatus (Griseb.) Wright ex Hook. (above; C. Wright 253, BR) and Lasianthus panamensis (Dwyer) Robbrecht (beneath; Mori \& Kallunki 2340, MO). From left to right: lateral view, adaxial view (with basal lid removed), cross section (at level indicated in longitudinal section) and longitudinal section. All $\times 11$.
and in many elements of the related tribe Psathureae. The formation of runners, which is very apparent in the recent collection from the province of Coclé (Dressler 6017), was described by Dwyer as the occurrence of "a pair of slender rigid opposite branches."

Lasianthus panamensis is certainly a distinct taxon, and there seems to be no doubt about its nativeness in Panama. It occurs in undisturbed forests and is frequent in at least three different areas with an extension of about 80 km from east to west in the part of Panama east of the Canal Zone (Dressler, personal communication). After the publication of Dressleriopsis, the taxon was also discovered about 100 km west of the Canal Zone: Panama, province of Coclé, W of Cano Sucio (trail to Chorro de Tife), ca. 13 km NNW of El Copé, very wet forest, 4 July 1981, R. L. Dressler 6017 (BR). The species may extend as far west as Veraguas, or even into Bocas del Toro or Costa Rica (Fig. 1).

The other Neotropical Lasianthus does not occur on the Central American continent but is limited to the West Indies; its correct citation should be $L$. lanceolatus (Griseb.) Wright ex Hook. in Benth. \& Hook., Gen. Pl. 2:129 (1873), and not L. lanceolatus (Griseb.) Urb. as is usually given (e.g. Alain, 1962). Hook-
er, although not formally, clearly proposes the transfer of Hoffmannia lanceolata to Lasianthus and refers to Wright for the idea. The differences between $L$. panamensis and L. lanceolatus are summarized in the following key:

Shrub up to 4 m tall without horizontal runners; leaf-blades $6-10 \mathrm{~cm}$ long and $2-3.5 \mathrm{~cm}$ wide, almost completely glabrous, with cuneate base symmetrical; pyrenes with a rough or grooved abaxial side.
L. lanceolatus

Low, mostly single-stemmed, woody plants, sometimes forming horizontal runners; leaf-blades up to 23 cm long and 9 cm wide, with a very apparent hairiness, with rounded base often asymmetrical; pyrenes with a smooth abaxial side.
L. panamensis

Pending a modern study of Lasianthus, the species discussed here can only be compared with Hooker's classification of the genus (1880) (taken over by Schumann, 1891:121). Lasianthus lanceolatus undoubtedly belongs to the series Nudiflorae. Lasianthus panamensis and the related Asiatic species mentioned above are harder to place and more or less agree with the series Bracteatae. In any event, the two Neotropical representatives of the genus Lasianthus are not closely related and seem to be the results of two separate cases of long distance dispersal.

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## Literature Cited

Alain, Hno. 1962. Flora de Cuba 5:363 p. Universidad de Puerto Rico, Editorial Universitaria. Denys, E. 1981. Les Lasianthus Jack (Rubiaceae) du Zaïre, du Rwanda et du Burundi. Bull. Jard. Bot. Nat. Belg. 51:445-456.
Dwyer, J. D. 1980. Family 179. Rubiaceae-Part 1. In R. E. Woodson et al., Flora of Panama. Part IX. Ann. Missouri Bot. Gard. 67:1-256.
Hooker, J. D. 1880. Order LXXV. Rubiaceae. In J. D. Hooker, The Flora of British India 3:17210.

Petit, E. 1964. Les espèces africaines du genre Psychotria L.-I. Bull. Jard. Bot. Etat. Bruxelles 34: 1-228.
Schumann, K. 1891. Rubiaceae. In A. Engler \& K. Prantl, Die natürlichen Pflanzenfamilien 4(4): 1-156.
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